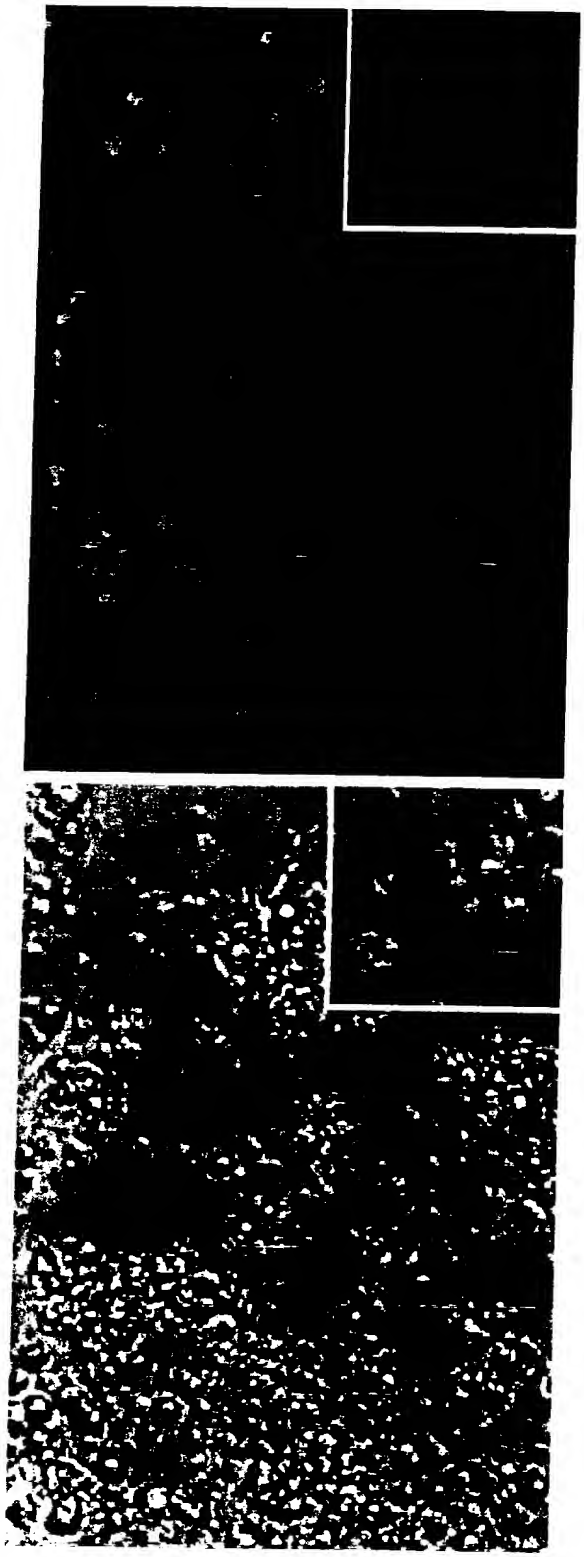


FIG. 1

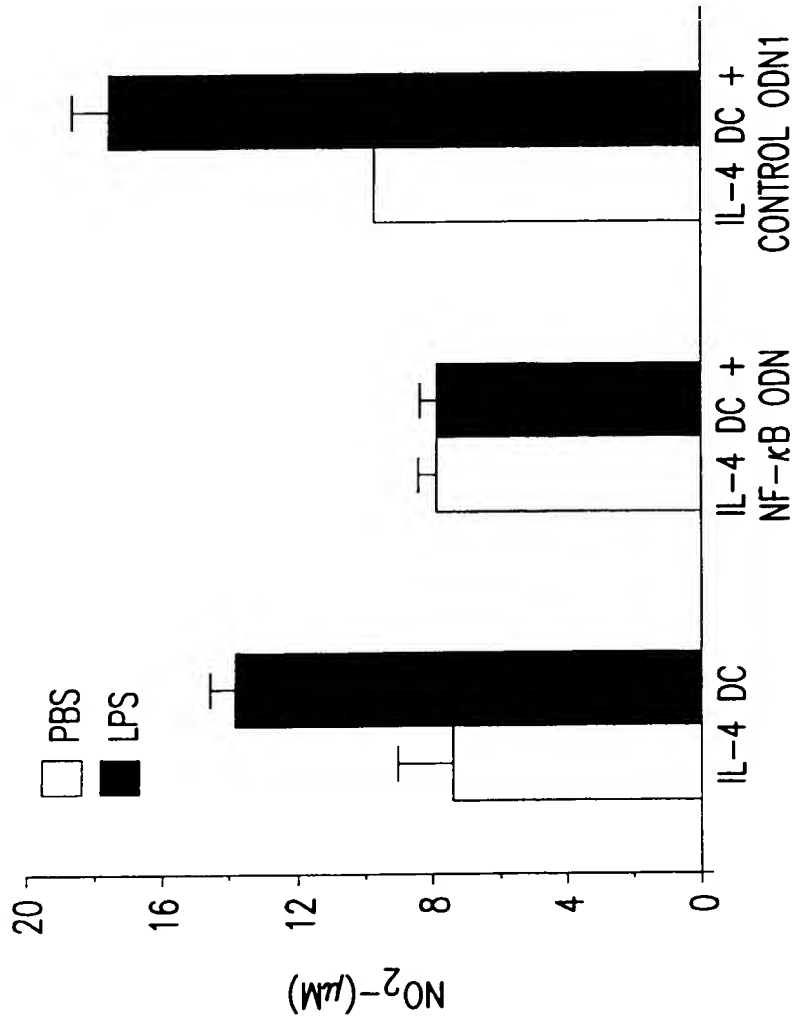

PBS
LPS
20
16
12
8
4
0
NO_2^- (μM)
IL-4 DC
IL-4 DC + NF-κB ODN
IL-4 DC + CONTROL ODN1

FIG.2

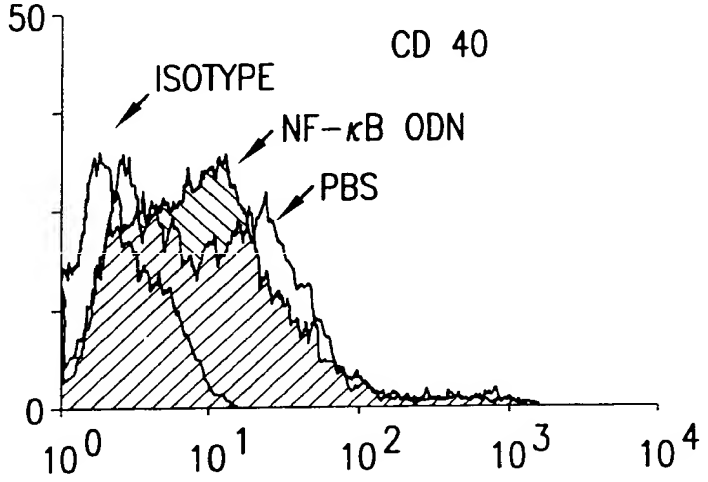

50
CD 40
ISOTYPE
NF-κB ODN
PBS
0
10^0
10^1
10^2
10^3
10^4

FIG. 3A

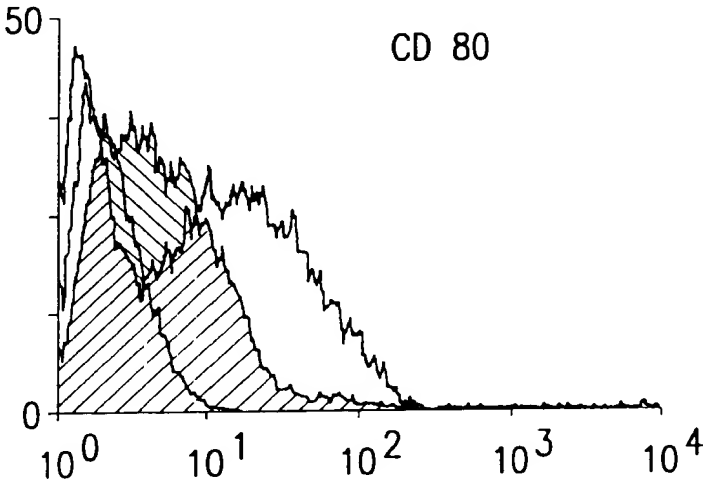

50
CD 80
0
10^0
10^1
10^2
10^3
10^4

FIG. 3B

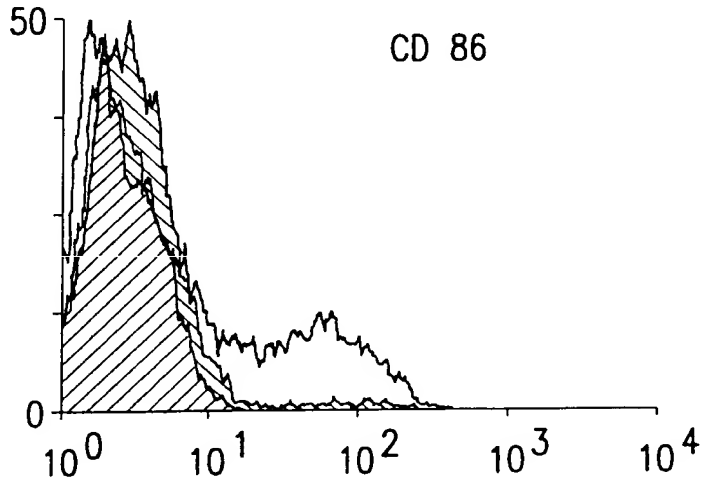


FIG. 3C

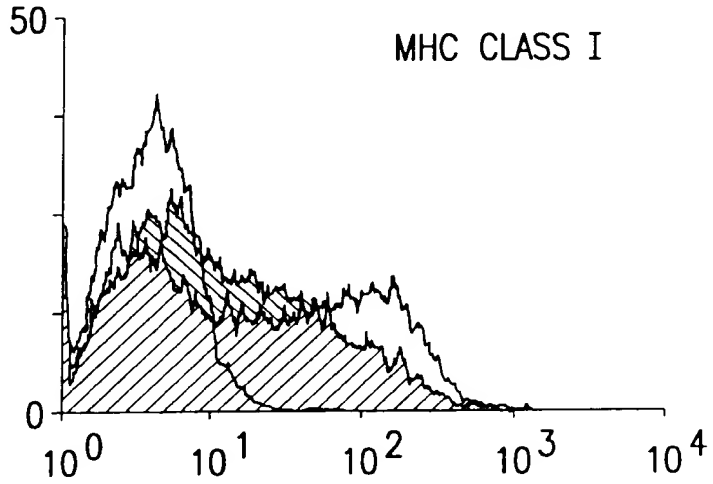


FIG. 3D

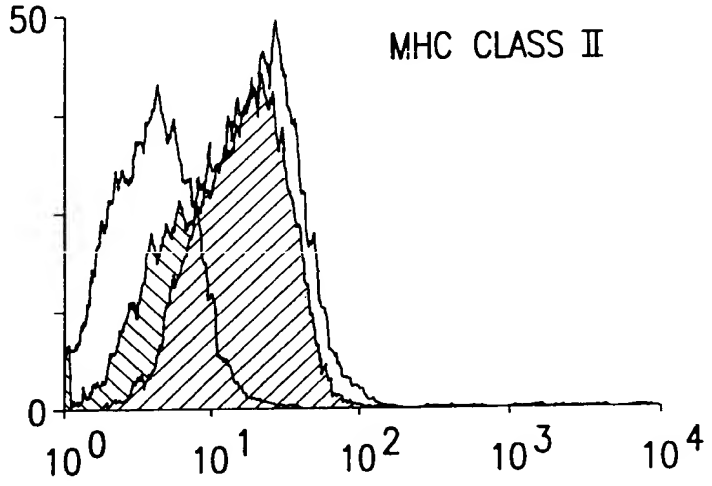

50
0
MHC CLASS II
10^0
10^1
10^2
10^3
10^4

FIG. 3E

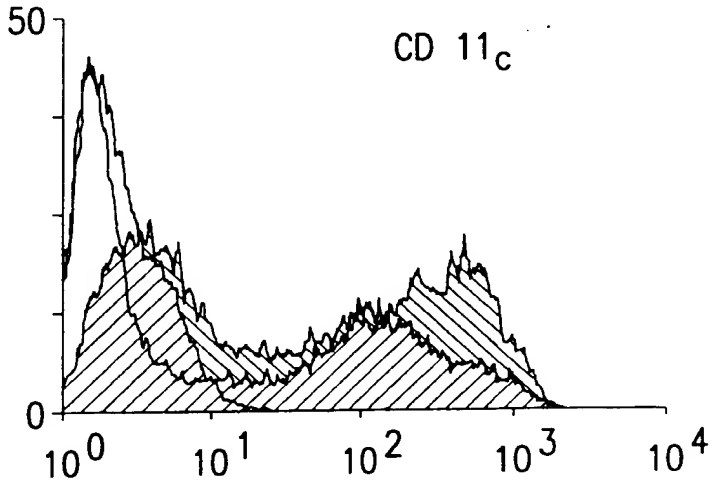

50
0
CD 11_c
10^0
10^1
10^2
10^3
10^4

FIG. 3F

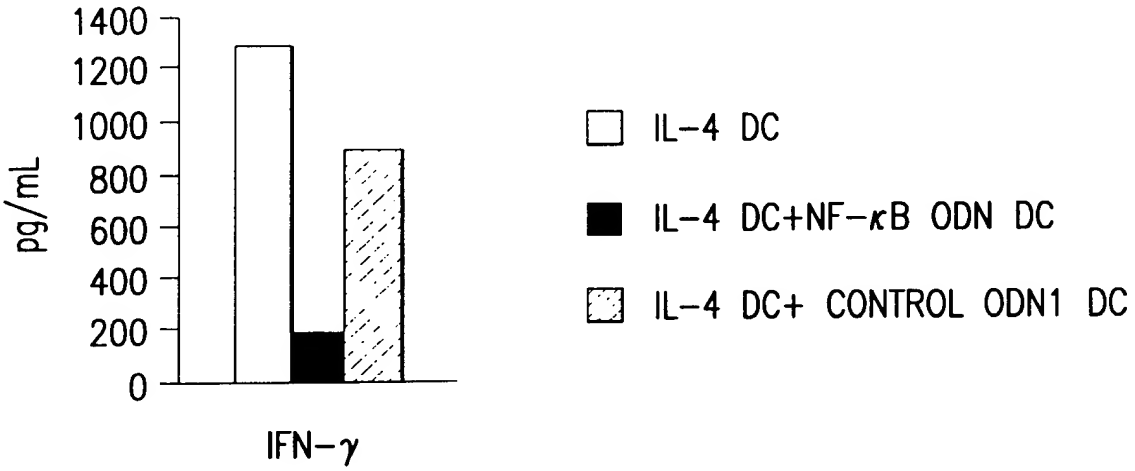


FIG. 4A

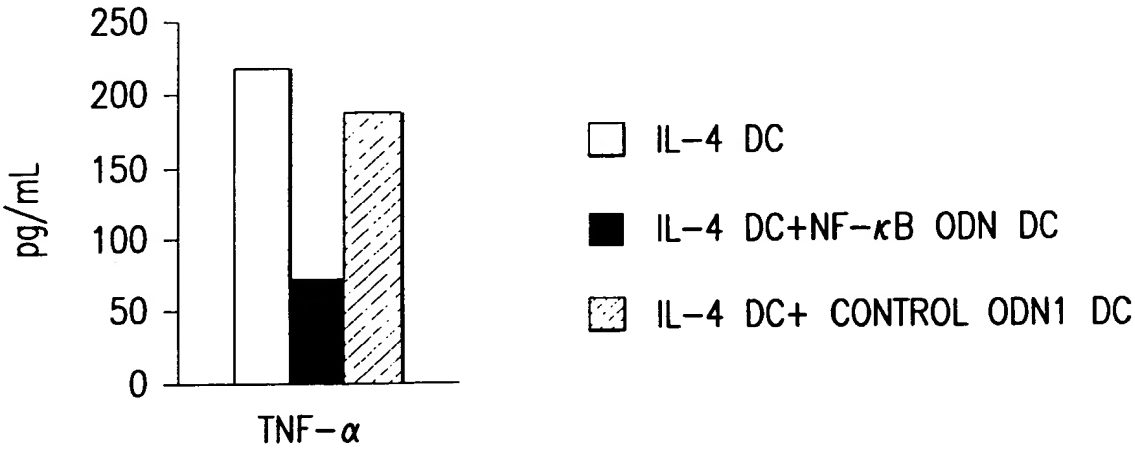


FIG. 4B

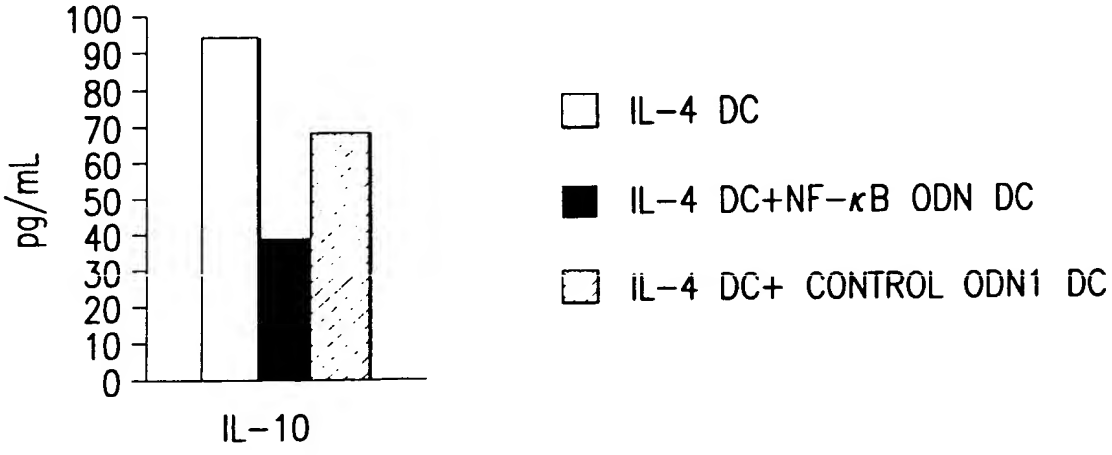


FIG. 4C

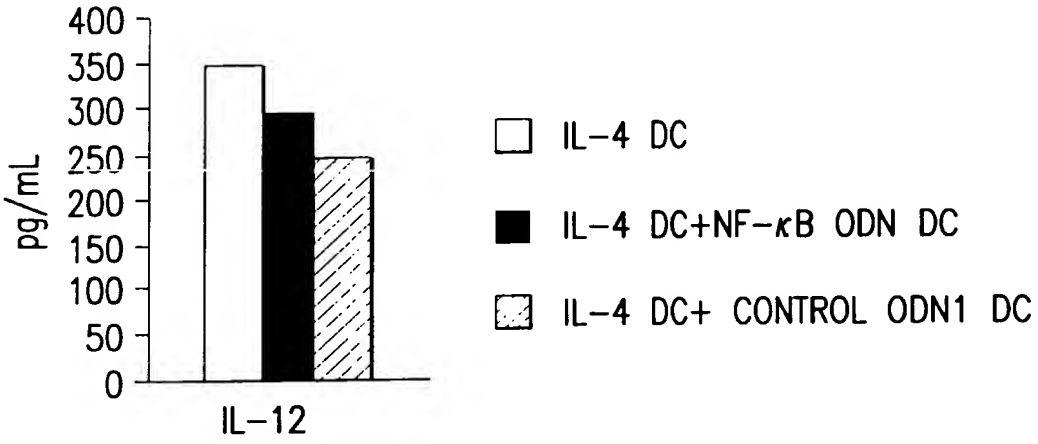

400
350
300
250
200
150
100
50
0
pg/mL
IL-12
IL-4 DC
IL-4 DC+NF-κB ODN DC
IL-4 DC+ CONTROL ODN1 DC

FIG. 4D

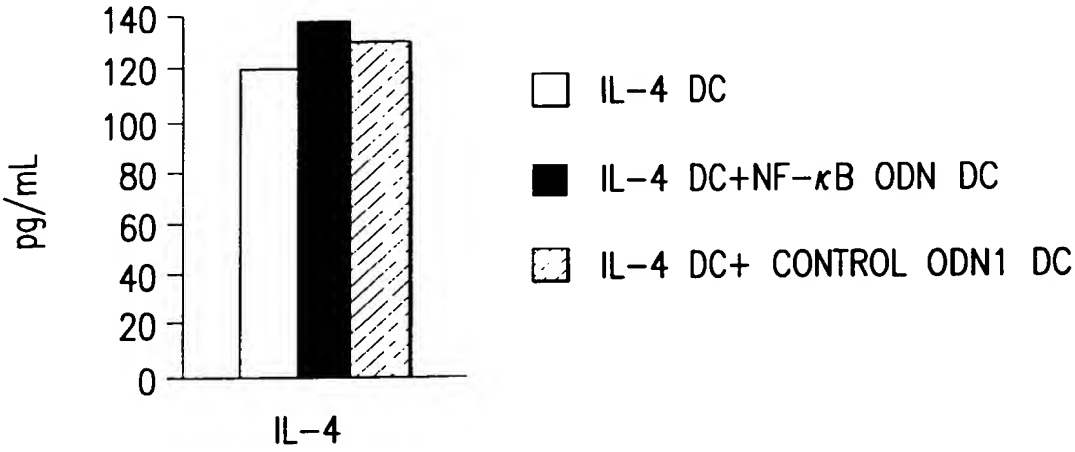

140
120
100
80
60
40
20
0
pg/mL
IL-4
IL-4 DC
IL-4 DC+NF-κB ODN DC
IL-4 DC+ CONTROL ODN1 DC

FIG. 4E

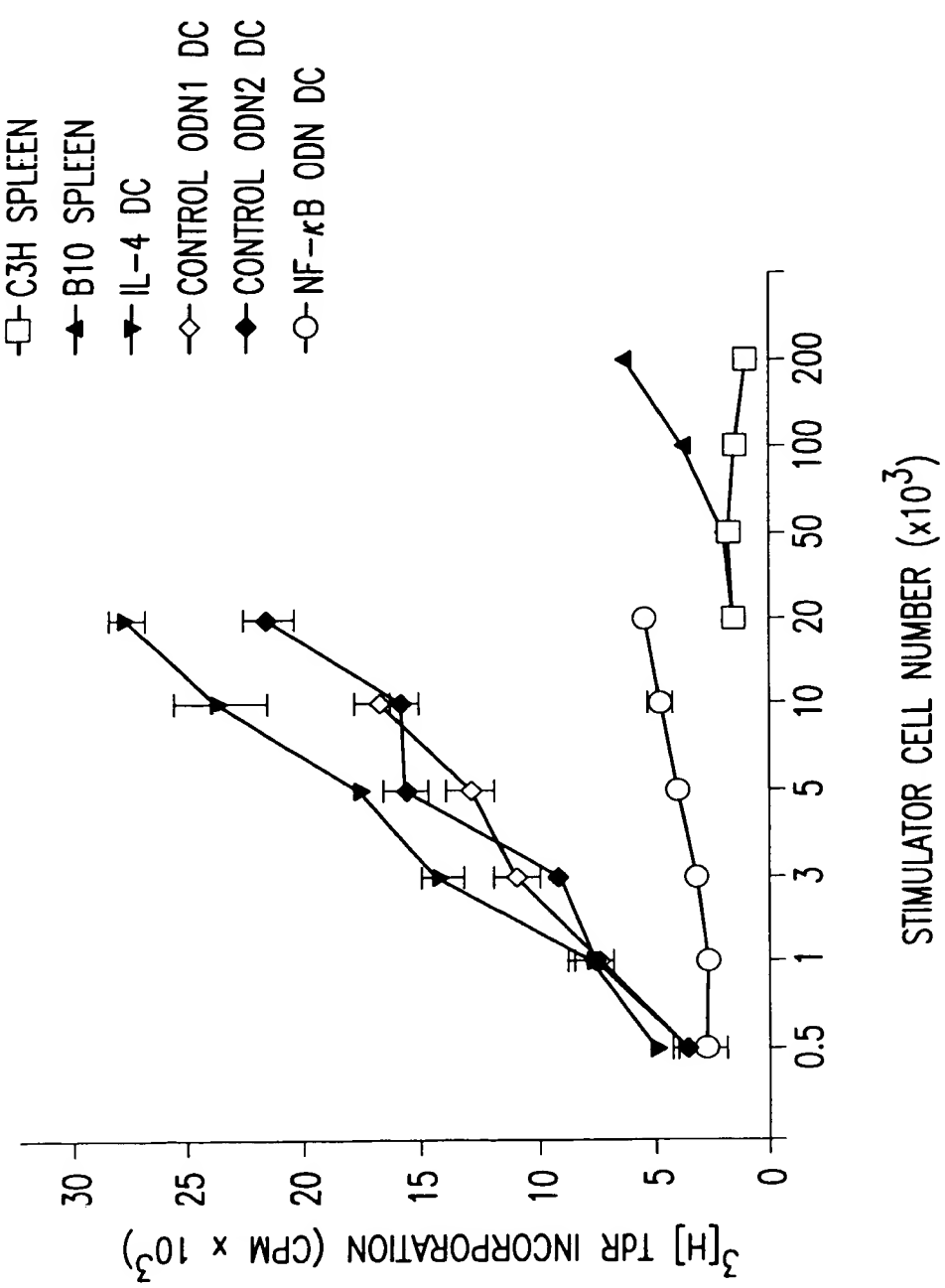

C3H SPLEEN
B10 SPLEEN
IL-4 DC
CONTROL ODN1 DC
CONTROL ODN2 DC
NF-κB ODN DC
^{3}[H] TdR INCORPORATION (CPM x 10^3)
0
5
10
15
20
25
30
0.5
1
3
5
10
20
50
100
200
STIMULATOR CELL NUMBER (x10^3)

FIG.5

DC nuclear extract	-	+	+	+	+
NF-κB competitor	-	-	+	-	-
NF-κB ODN competitor	-	-	-	+	-
Control ODN2 competitor	-	-	-	-	+

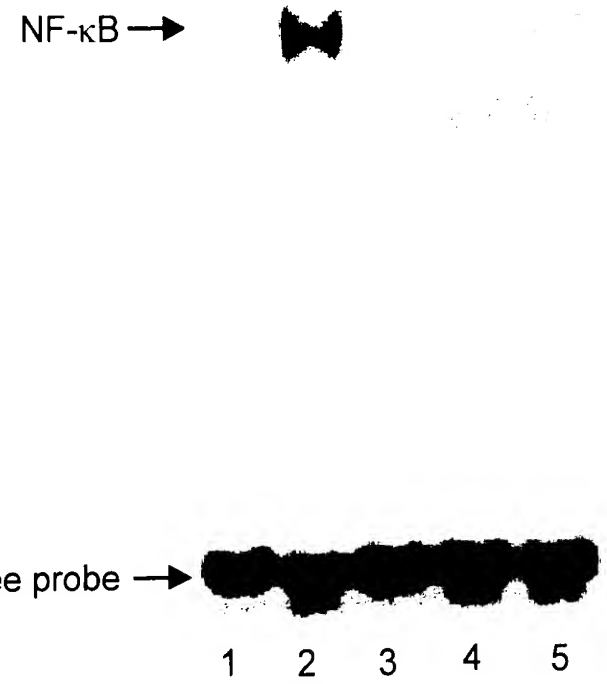


FIG.6A

DC nuclear extract	-	+	-	-
DC Tχ w/NF-κB ODN	-	-	+	-
DC Tχw/ control ODN2	-	-	-	+
NF-κB competitor	-	+	-	-

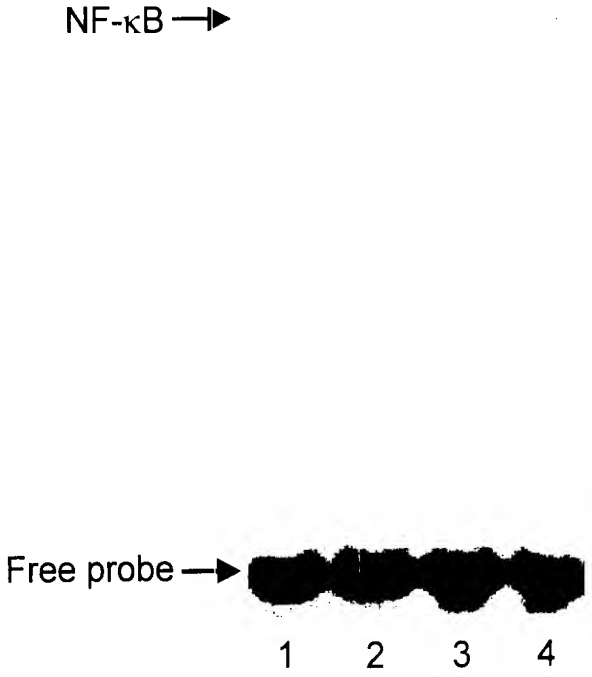


FIG.6B

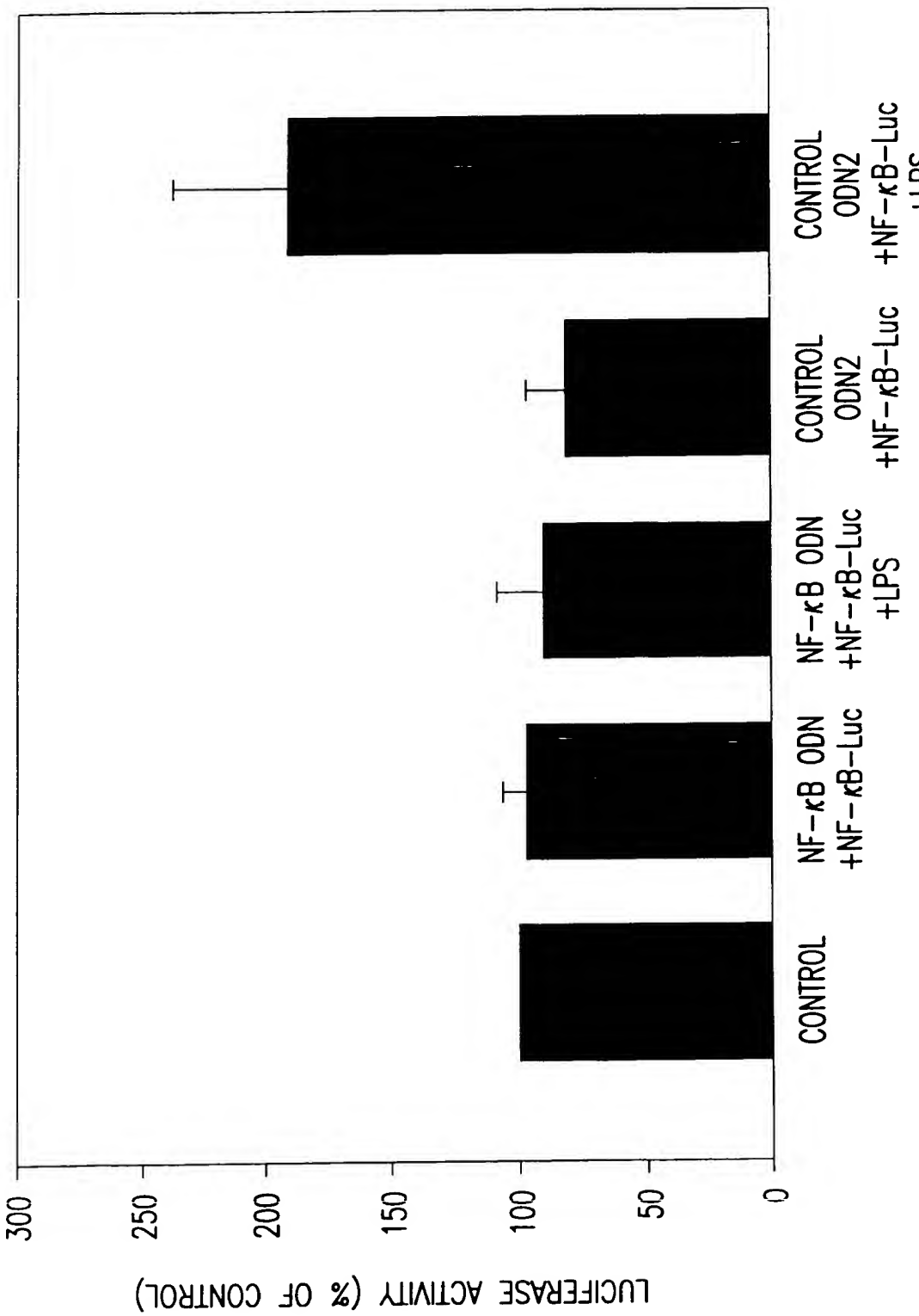

LUCIFERASE ACTIVITY (% OF CONTROL)
300
250
200
150
100
50
0
CONTROL
NF-κB ODN +NF-κB-Luc
NF-κB ODN +NF-κB-Luc +LPS
CONTROL ODN2 +NF-κB-Luc
CONTROL ODN2 +NF-κB-Luc +LPS

FIG.7

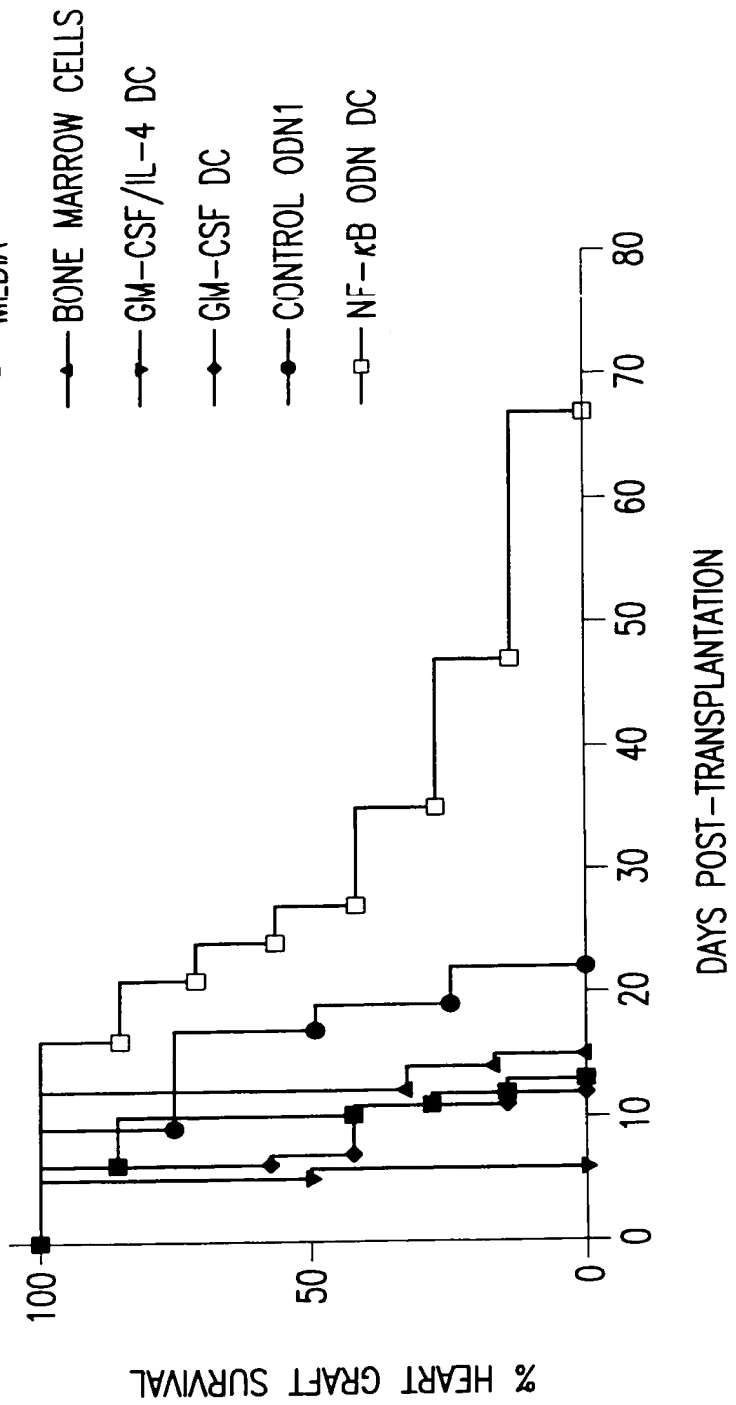

MEDIA
BONE MARROW CELLS
GM-CSF/IL-4 DC
GM-CSF DC
CONTROL ODN1
NF-κB ODN DC
% HEART GRAFT SURVIVAL
100
50
0
0
10
20
30
40
50
60
70
80
DAYS POST-TRANSPLANTATION

FIG.8

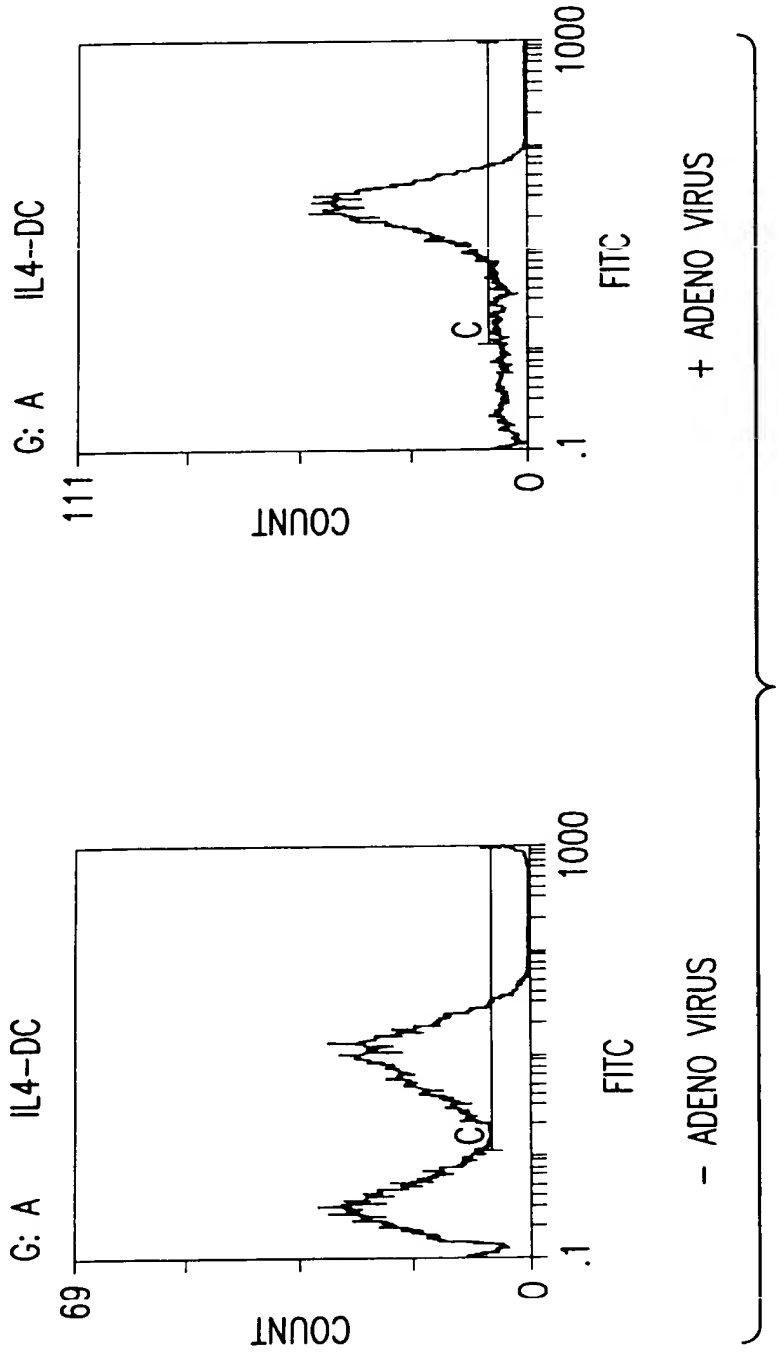

G: A IL4-DC
COUNT
111
0
.1
1000
FITC
C
+ ADENO VIRUS
G: A IL4-DC
COUNT
69
0
.1
1000
FITC
C
- ADENO VIRUS

FIG.9A

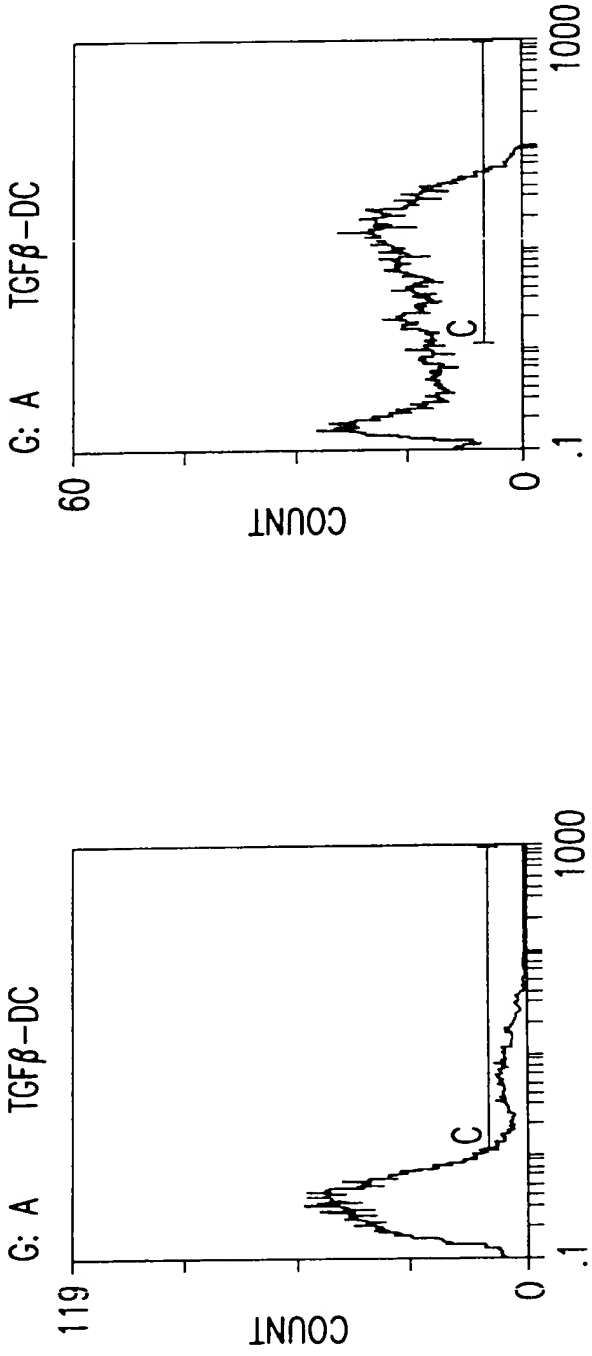

G: A TGFβ-DC
COUNT
119
0
.1
1000
FITC
C
- ADENO VIRUS
G: A TGFβ-DC
COUNT
60
0
.1
1000
FITC
C
+ ADENO VIRUS

FIG.9B

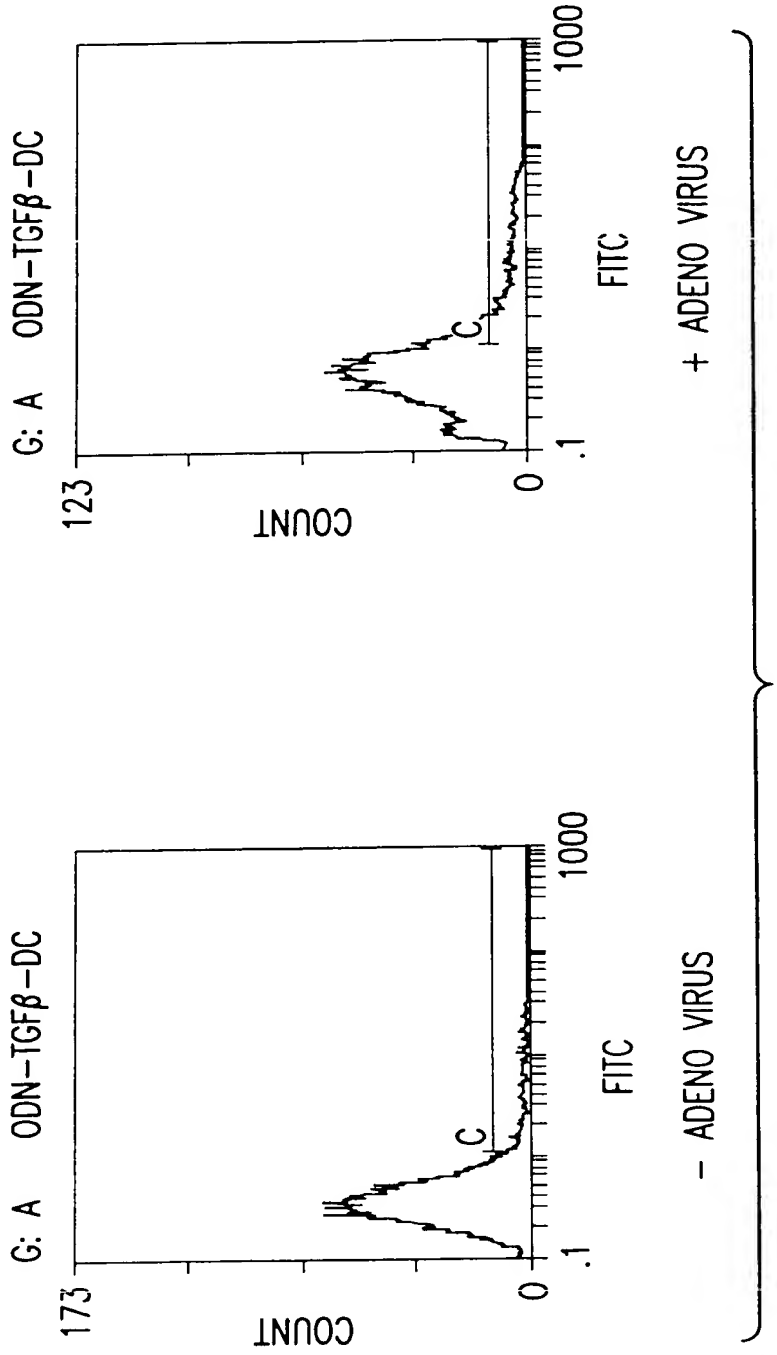

G: A ODN-TGFβ-DC
COUNT
123
0
.1
1000
FITC
C
+ ADENO VIRUS
G: A ODN-TGFβ-DC
COUNT
173
0
.1
1000
FITC
C
- ADENO VIRUS

FIG.9C

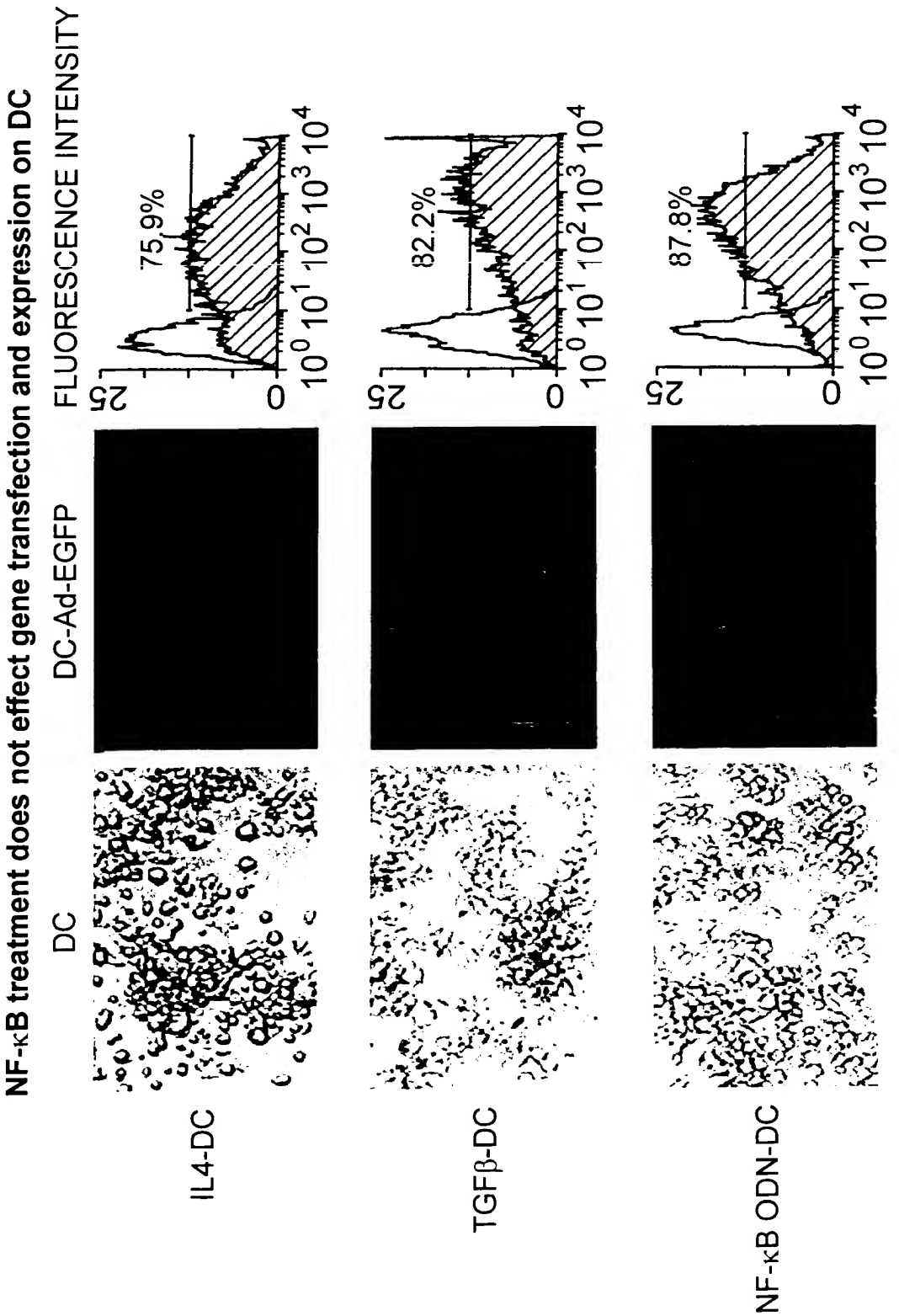
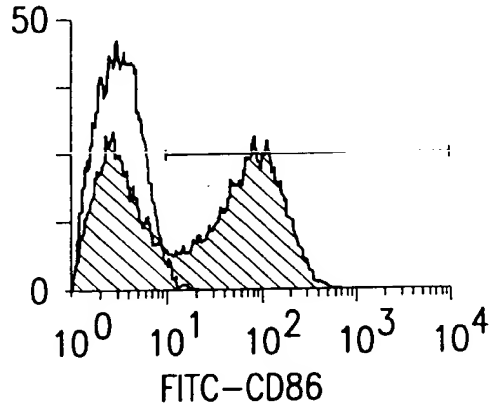

NF-κB treatment does not effect gene transfection and expression on DC
DC
DC-Ad-EGFP
FLUORESCENCE INTENSITY
IL4-DC
TGFβ-DC
NF-κB ODN-DC
75.9%
82.2%
87.8%
25
0
10^0 10^1 10^2 10^3 10^4

FIG.10

IL-4 DC

NO TRANSDUCTION



AFTER Ad-Ψ5 TRANSDUCTION

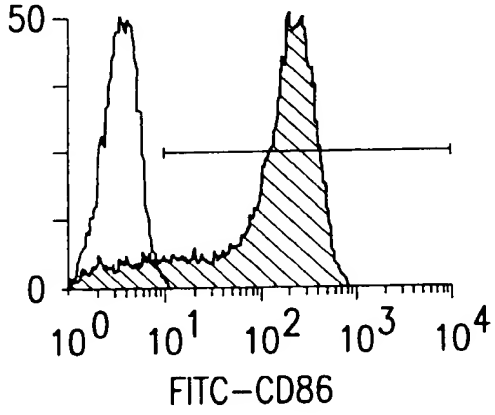
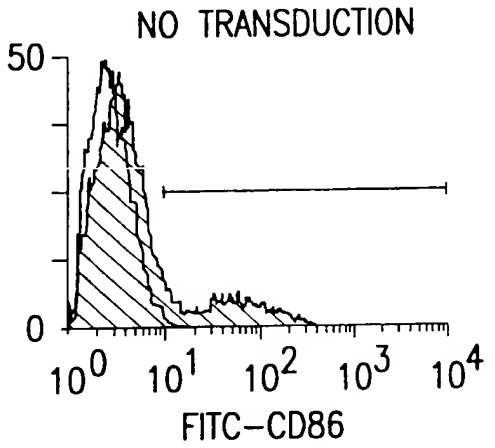


FIG.11A

TGFβ DC



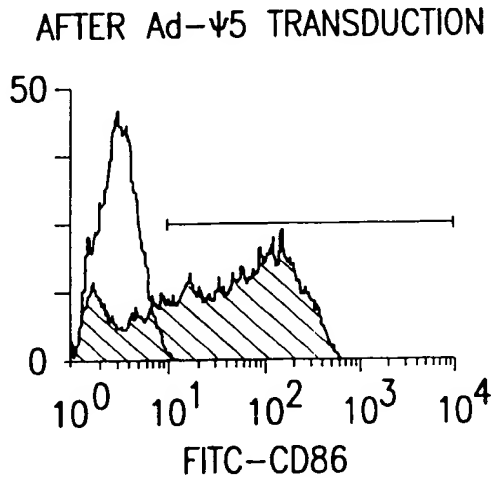
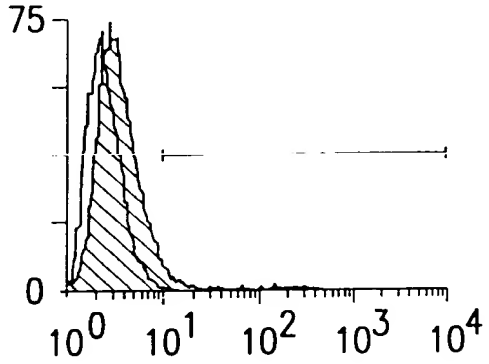


FIG.11B

NF-κB ODN DC

NO TRANSDUCTION



AFTER Ad-Ψ5 TRANSDUCTION

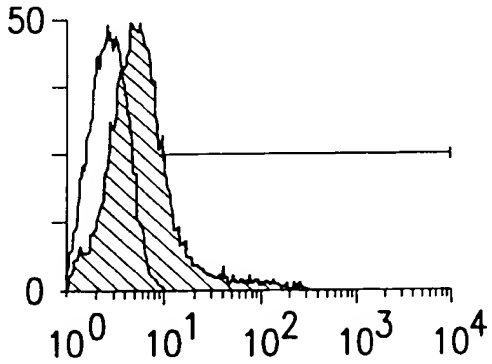


FIG.11C

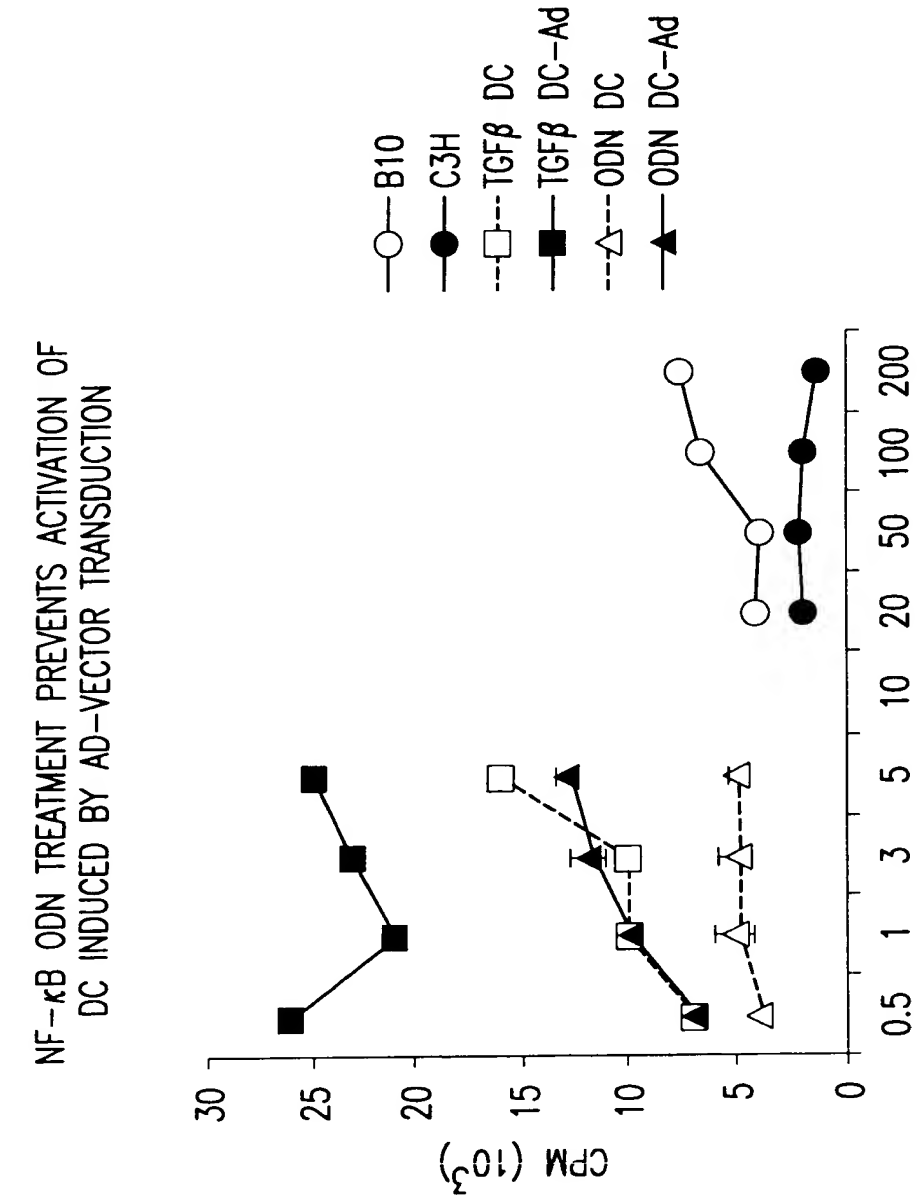
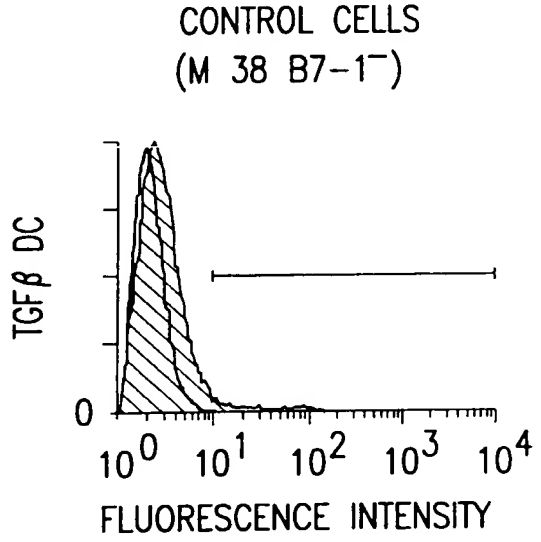

NF-κB ODN TREATMENT PREVENTS ACTIVATION OF DC INDUCED BY AD-VECTOR TRANSDUCTION
B10
C3H
TGFβ DC
TGFβ DC-Ad
ODN DC
ODN DC-Ad
CPM (10³)
30
25
20
15
10
5
0
0.5
1
3
5
10
20
50
100
200
STIMULATOR CELL NUMBER

FIG. 12

CTLA4Ig IS EFFICIENTLY PRODUCED BY
Ad-CTLA4Ig TRANSDUCED NF-κB ODN DC



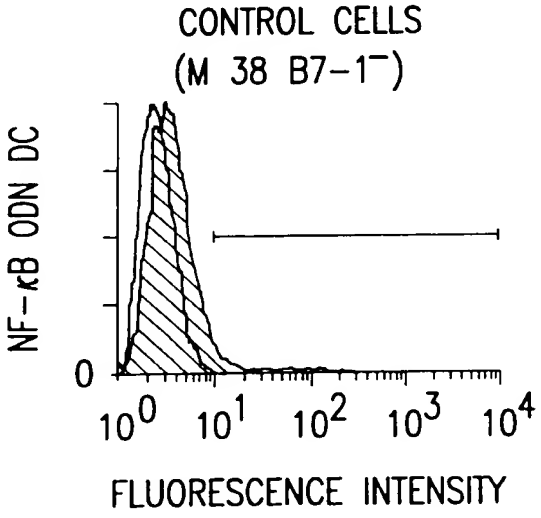
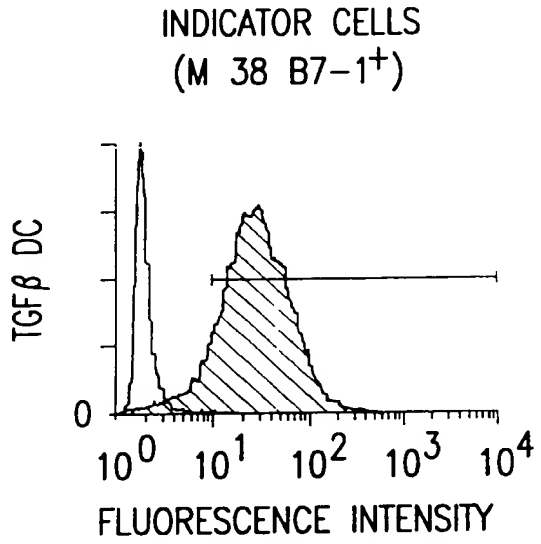


FIG.13A

CTLA4Ig IS EFFICIENTLY PRODUCED BY
Ad-CTLA4Ig TRANSDUCED NF-κB ODN DC



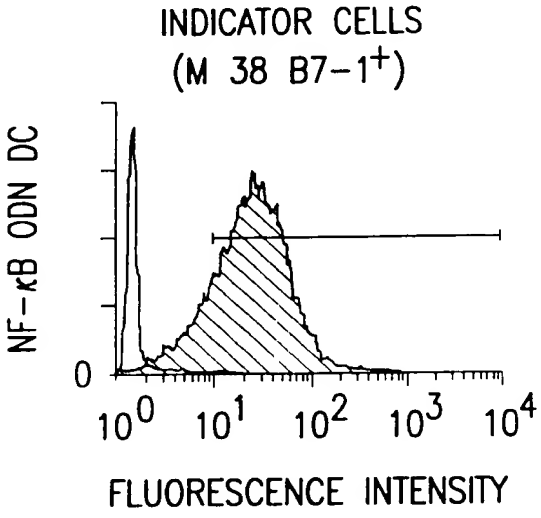


FIG.13B

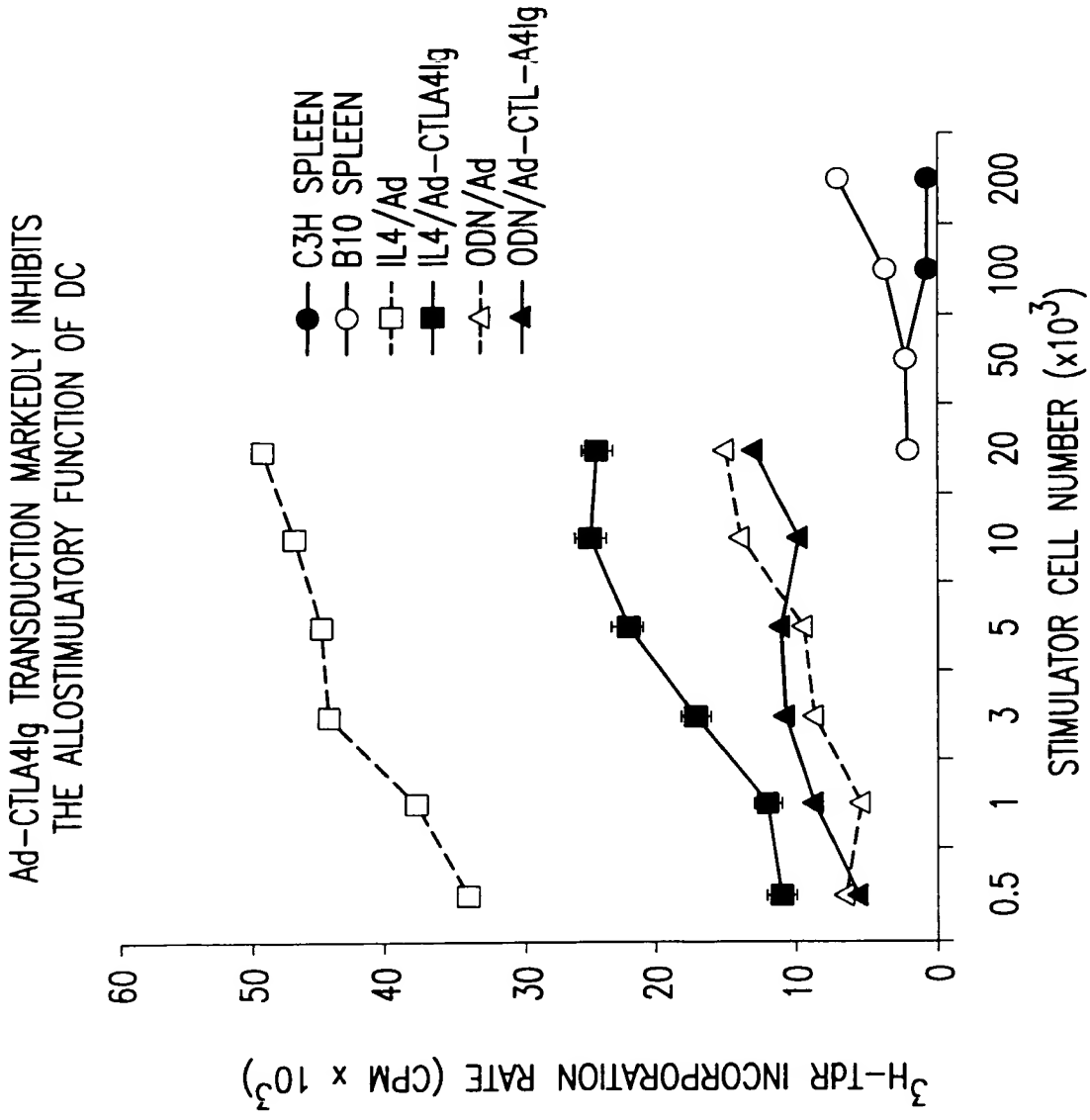

Ad-CTLA4Ig TRANSDUCTION MARKEDLY INHIBITS
THE ALLOSTIMULATORY FUNCTION OF DC
C3H SPLEEN
B10 SPLEEN
IL4/Ad
IL4/Ad-CTLA4Ig
ODN/Ad
ODN/Ad-CTL-A4Ig
^{3}H-TdR INCORPORATION RATE (CPM x 10^3)
60
50
40
30
20
10
0
0.5
1
3
5
10
20
50
100
200
STIMULATOR CELL NUMBER (x10^3)

FIG. 14

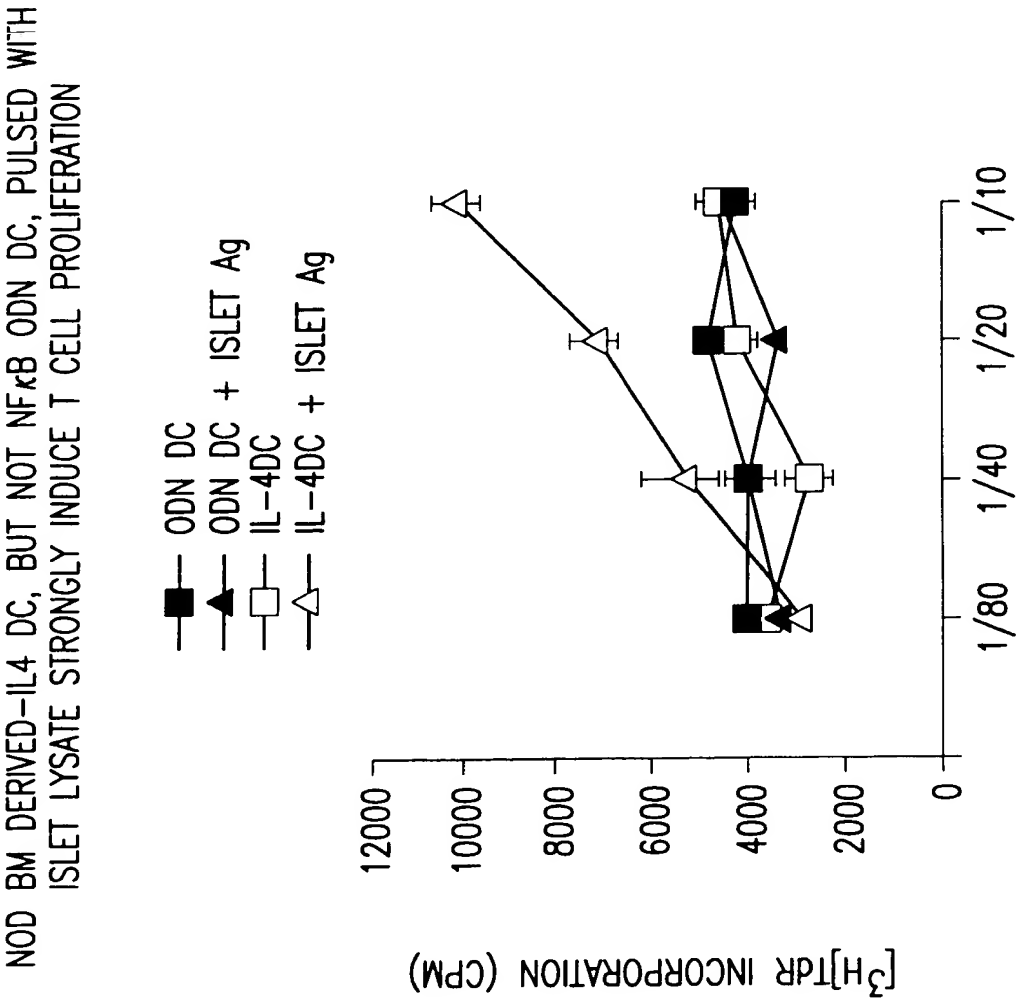

NOD BM DERIVED-IL4 DC, BUT NOT NFκB ODN DC, PULSED WITH ISLET LYSATE STRONGLY INDUCE T CELL PROLIFERATION
ODN DC
ODN DC + ISLET Ag
IL-4DC
IL-4DC + ISLET Ag
[3H]TdR INCORPORATION (CPM)
12000
10000
8000
6000
4000
2000
0
1/80
1/40
1/20
1/10
S/R RATIO

FIG. 15A

NOD BM DERIVED–IL4 DC, BUT NOT NFκB ODN DC, PULSED WITH ISLET LYSATE STRONGLY INDUCE T CELL PROLIFERATION

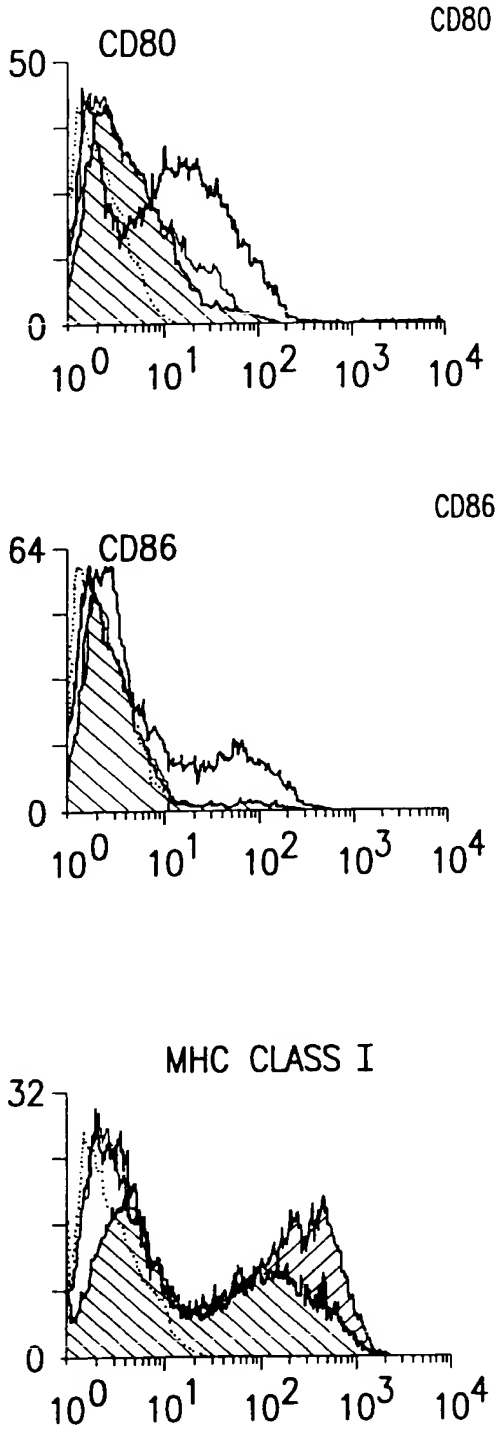


FIG. 15B

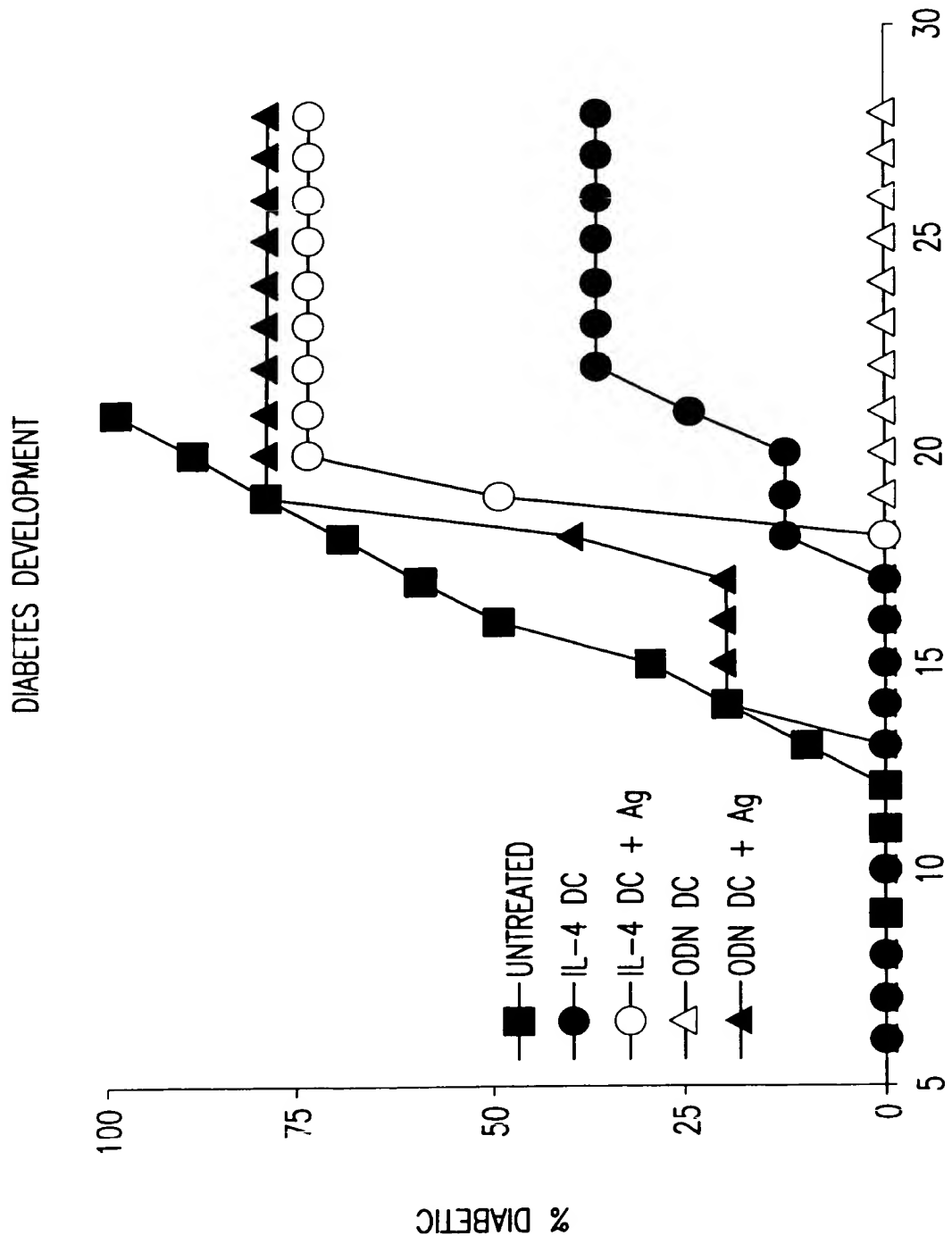

DIABETES DEVELOPMENT
% DIABETIC
100
75
50
25
0
5
10
15
20
25
30
AGE (WKS)
UNTREATED
IL-4 DC
IL-4 DC + Ag
ODN DC
ODN DC + Ag

FIG. 16